

### **REMARKS**

This Reply is responsive to the Office Action mailed May 12, 2005. It is anticipated that the amendments and remarks contained herein should obviate all the outstanding rejections and objections, and place this case in condition for allowance.

Applicants confirm their Election of Group I, claims 1-11 and SEQ ID NO:55 and SEQ ID NO:56 directed to methods of representing sensory perception of one or more odorants using a set of olfactory receptor polypeptides wherein at least one comprises SEQ ID NO:55. All of the newly submitted claims correspond to the elected claims which are rewritten to require SEQ ID NO:55 consistent with the election. Additionally, in order to expedite prosecution the non-elected claims are cancelled without prejudice to their being resubmitted in a continuation or divisional application. Based on the foregoing, favorable reconsideration of the claims pursuant to and consistent with 37 CFR 1.112 is respectfully requested.

Turning now to the Office Action, the only outstanding rejection is a §103 rejection of previous claims 1-11 based on Krautwurst et al. (Cell, 1998) in view of Burford et al. (US 2004/022314). This rejection is respectfully traversed to the extent it may be applicable to new claims 23-36.

Essentially the position of the Examiner is that Krautwurst et al. teaches the method steps of the independent claim which comprise:

(a) providing a representative class of  $n$  olfactory receptors or ligand-binding domains thereof;

(b) measuring  $X_1$  to  $X_n$  representative of at least one activity of the one or more odorants selected from the group consisting of binding of the one or more odorants to the ligand-binding domain of at least one of the  $n$  olfactory receptors, activating at least one of the  $n$  olfactory receptors with the one or more odorants, and blocking at least one of the  $n$  olfactory receptors with the one or more odorants; and

(c) generating a representation of sensory perception from the values  $X_1$  to  $X_n$

but fails to teach such method using the particular olfactory receptor contained in SEQ ID NO:55. However, the Examiner concludes that the use of the olfactory sequence in SEQ ID NO:55 would have been obvious based on the Burford et al reference. This rejection is respectfully traversed.

As recognized by the Examiner, Krautwurst et al. reference fails to teach suggest the claimed invention because the reference fails to teach or suggest the olfactory sequence contained in SEQ ID NO:55. Therefore it does not satisfy all of the essential claim limitations. Moreover, Applicants respectfully submit that the Krautwurst reference further fails to teach or suggest the inventive method of representing sensory perception using the specific set of olfactory receptors recited in claim 24 and further recited in claims 33-36 which require methods

which use at least 50-200 of the specific human olfactory receptor sequences recited in claim 24.

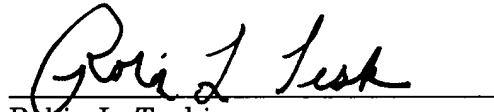
Therefore, Krautwurst et al. at least individually does not teach or suggest the claimed invention. Moreover, Burford does not cure the deficiencies of Krautwurst et al. While the reference teaches a genus of GPCR's including one having SEQ ID NO:55, there is no specific recognition that this sequence encodes an olfactory receptor. Rather, Burford discloses a number of GPCRs having a variety of predicted potential functions with no specific recognition that SEQ ID NO:55 encodes a human olfactory receptor. Based at least on this deficiency, Applicants respectfully submit that this reference alone or in combination does not teach or suggest the claimed methods of representing sensory perception. Additionally, Burford similar to the Krautwurst et al further fails to teach or suggest a method of representing sensory perception using the specific set of olfactory receptors recited in claim 24 and as further required by claims 33-36 which require methods that utilize at least 50-200 of the recited specific novel set of human olfactory receptor sequences. Therefore, withdrawal of the 103 rejection based on Krautwurst et al. in view of Burford et al. is respectfully requested.

Based on the foregoing, this application is believed to be in condition for allowance. A Notice to that effect is respectfully solicited. If the Examiner has any questions concerning this application, he is respectfully requested to contact the undersigned so that prosecution may be expedited.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 04-1679 (Docket T1530-00100).

Respectfully submitted,

October 7, 2005

A handwritten signature in black ink, appearing to read "Robin L. Teskin", is written over a horizontal line.

Robin L. Teskin

Registration No. 35,030

DUANE MORRIS LLP  
Intellectual Property Group  
1667 K Street P.O. Box 14300  
Washington, DC 20006-1608  
Telephone No.: (202) 776-7800  
Facsimile No.: (202) 628-8844

RLT/ast